

In the Drawings

Please revise the drawings in accordance with the Request for Approval of Drawing
Corrections attached hereto.

REMARKS

A new drawing has been added (i.e., FIG. 8) to reflect a feature (i.e., a circular semiconductor segment) described in the specification on page 7, lines 12-18. Additionally, the specification has been amended to describe the new drawing (FIG. 8). No new matter has been added.

The Examiner rejected claims 9, 11, 13, 21, 23, 25-26, 28 and 31-32 under 35 U.S.C. §103(a) as allegedly being unpatentable over Nagarajan *et al.* (U.S. Pat. 6,639,321) (Previously applied) in view of Kinsman *et al.* (U.S. Pat. 6,717,245) (newly cited) and further in view of Akram *et al.* (U.S. Pat. 6,155,247) (newly cited).

Applicants respectfully traverse the §103 rejections with the following arguments.

35 U.S.C. §103

Claims 9, 11, 13, 21, 23, 25-26, 28 and 31-32 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Nagarajan *et al.* (U.S. Pat. 6,639,321) (Previously applied) in view of Kinsman *et al.* (U.S. Pat. 6,717,245) (newly cited) and further in view of Akram *et al.* (U.S. Pat. 6,155,247) (newly cited).

The Examiner alleges that “Regarding claims 9 and 25, Nagarajan *et al.* disclose a semiconductor device comprising:

a substrate 108; a semiconductor die electrically coupled to the substrate; and wherein the substrate comprises a coefficient of thermal expansion that is greater than a coefficient of thermal expansion of the semiconductor die 202 (cover fig., column 5, lines 19-23).

Nagarajan *et al.* fail to disclose a plurality of segments electrically coupled to the substrate and at least one segment of the plurality of segment is not congruent with respect to a remaining segment of the plurality of segments.

However, Kinsman *et al.* disclose a semiconductor device comprising:

a substrate 50, wherein the substrate is selected from the group consisting of a printed circuit board (fig. 4, column 9, lines 24-25);

a semiconductor device 10 is electrically coupled to the substrate, wherein the semiconductor device is divided into a plurality of segments 34 (fig. 4) to form a multichip module resulting in a smaller package with increased performance for the semiconductor package (column 9, lines 51-52).

Akram *et al.* disclose a semiconductor device comprising: a semiconductor device is divided

into a plurality of segments, wherein at least one segment 204 of the plurality of segments is not congruent with respect to a remaining segment of the plurality of segments (figs. 5 and 9, abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Nagarajan et al. by having a plurality of segments electrically coupled to the substrate, as taught by Kinsman et al., and at least one segment is not congruent, as taught by Akram et al., in order to form a multi-chip module resulting in a smaller package with increased performance for the semiconductor package (Kinsman et al., column 9, lines 51-52) and use the semiconductor device in a particular application (Akram et al., fig. 5)".

As to claims 9 and 25 as amended, Applicants respectfully contend that claim 9 is not unpatentable over Nagarajan in view of Kinsman and further in view of Akram, because Nagarajan, Kinsman, and Akram do not individually or collectively teach or suggest each and every feature of claim 9. For example, Nagarajan, Kinsman, and Akram do not teach or suggest the feature of "a semiconductor device electrically coupled to the substrate, wherein the semiconductor device is divided into a plurality of segments, wherein at least one segment of the plurality of segments is not congruent with respect to a remaining segment of the plurality of segments, wherein the substrate comprises a coefficient of thermal expansion that is greater than a coefficient of thermal expansion of the semiconductor device, and wherein said at least one segment of the plurality of segments is a **circular** segment " (emphasis added). Nagarajan, Kinsman, and Akram do not teach or suggest that a semiconductor device is divided into a plurality of segments and that one of the segments is a **circular** segment as taught by Applicant's claims 9 and 25. In contrast, Nagarajan and Kinsman each teach rectangular semiconductor

devices and Akram teaches a semiconductor wafer having rectangular semiconductor devices to be diced. Therefore, Applicant contends that Nagarajan, Kinsman, and Akram do not teach or suggest the semiconductor device comprising the **circular** segment of Applicant's claims 9 and 25. Based on the preceding arguments, Applicants respectfully maintain that claims 9 and 25 are not unpatentable over Nagarajan in view of Kinsman and further in view of Akram, and that claims 9 and 25 are in condition for allowance. Since claims 10, 11, 13, 21 and 23 depend from claim 9 and claims 26, 28 and 30-32 depend from claim 25, Applicants contend that claims 10, 11, 13, 21, 23, 26, 28 and 30-32 are likewise in condition for allowance.

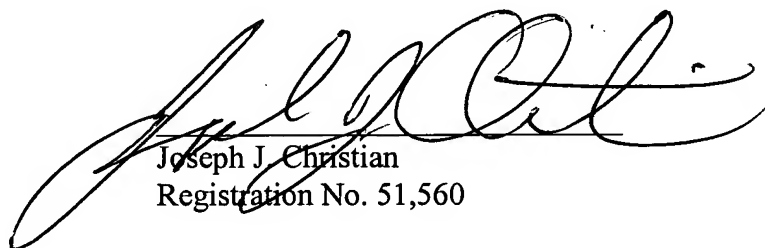
CONCLUSION

Based on the preceding arguments, Applicants respectfully believe that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicants invites the Examiner to contact Applicants' representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account 09-0457.

Date:

6/27/05

Schmeiser, Olsen & Watts
3 Lear Jet Lane, Suite 201
Latham, New York 12110
(518) 220-1850



Joseph J. Christian
Registration No. 51,560